

2. 研究業績 / Research Achievements

2. 研究業績 / Research Achievements (April 2012-March 2013)

2.1 論文・著書 / Journal Articles/ Books/ Book Chapters

Journal Articles

- Abd Elbasit, M.A.M., Huang, J., Ojha, C.S.P., Yasuda, H. and Eltayeb, O.A. (Feb. 2013): Spatiotemporal changes of rainfall erosivity in Loess Plateau, China. ISRN Soil Science, vol. 2013, Article ID 256352.
- Abd Elbasit, M.A.M., Yasuda, H., Yoda, K., Eldoma, A., Nawata, H., Hoshino, B. and Magzoub, M.K. (Jun. 2012): Mesquite (*Prosopis* spp.) water uptake under simulated drought conditions. Journal of Arid Land Studies, 22, 5–8.
- Abu Hena, M.K., Cho, K., Kim, D-E., Uozumi, N., Chung, K-Y., Lee, S.Y., Choi, J.-S., Cho, S.-W., Shin, CH-S. and Woo, S.H. (Sep. 2012): Changes in physiology and protein abundance in salt-stressed wheat chloroplasts. Molecular Biology Reports, 39, 9059–9074.
- Abulaiti, A., Kimura, R. and Shinoda, M. (Feb. 2013): Vegetation effects on saltation flux in a grassland of Mongolia. Sand Dune Research, 59, 117–128.
- Abulaiti, A., Kimura, R. and Wang, W. (Mar. 2013): Characteristics of dust and saltation frequencies in the center of the Hexi Corridor of China during spring 2011. Journal of Arid Land Studies, 22, 427–434.
- Adgo, E., Teshome, A. and Mati, B. (Jan. 2013): Impacts of long-term soil and water conservation on agricultural productivity: The case of Anjenie watershed, Ethiopia. Agricultural Water Management, 117, 55–61.
- Agrawal, R., Tsujimoto, H., Tandon, R., Rao, S. and Raina, S. (Mar. 2013): Species-genomic relationships among the tribasic diploid and polyploid *Carthamus* taxa based on physical mapping of active and inactive 18S-5.8S-26S and 5S ribosomal RNA gene families, and the two tandemly repeated DNA sequences. Gene, 521, 136–144.
- Ahmad, Z., Abd-Elbasit, M.A.M., Inoue, M., Yasuda, H., Honna, T. and Yamamoto, S. (Mar. 2012): Use of two industrial wastes as soil amendments. Effect on dissolved reactive phosphorus in runoff. Soil and Sediment Contamination, 21, 207–226.
- Ando, T., Tsunekawa, A., Tsubo, M. and Kobayashi, H. (Dec. 2012): Identification of factors impeding the spread of *Jatropha* cultivation in the state of Chiapas, Mexico. Sustainable Agriculture Research, 2, 54–59.
- Ando, T., Tsunekawa, A., Tsubo, M. and Kobayashi, H. (Dec. 2012): Impact of introducing of *Jatropha curcas* L. on the current home farming system, A case study of Tierra Santa Village, Mexico. [安藤孝之・恒川篤史・坪充・小林一 (2012年12月) : メキシコ合衆国小規模村落におけるバイオ燃料植物 *Jatropha curcas* L. 導入の評価 Tierra Santa 村の家族経営農家を対象として. 農業経営研究, 50, 78–83.]
- Bat-Oyun, T., Shinoda, M. and Tsubo, M. (Sep. 2012): Effects of water and temperature stresses on radiation use efficiency in a semi-arid grassland. Journal of Plant Interactions, 7, 214–224.
- Bat-Oyun, T., Shinoda, M. and Tsubo, M. (Dec. 2012): Ef-

fects of cloud, atmospheric water vapor, and dust on photosynthetically active radiation and total solar radiation in a Mongolian grassland. Journal of Arid Land, 4, 349–356.

- Chanie, T., Collick, A.S., Adgo, E., Lehmann, C.J. and Steenhuis, T.S. (Mar. 2013): Eco-hydrological impacts of *Eucalyptus* in the semi humid Ethiopian Highlands: the Lake Tana Plain. Journal of Hydrology and Hydro-mechanics, 61, 21–29.
- Chen, D., Zhang, X., Kang, H., Sun, X., Yin, S., Du, H., Yamanaka, N., Gapare, W., Wu, H.X. and Liu, C. (Oct. 2012): Phylogeography of *Quercus variabilis* based on Chloroplast DNA sequence in East Asia: Multiple glacial refugia and mainland-migrated island populations. PLoS ONE, 7, 1–14.
- Cheng, Y. (May 2012): Vegetation and desertification in arid land of Central Asia. Journal of the Japanese Society of Revegetation Technology, 37(4), 460–461. [程云湘 (2012年5月) 中央アジア乾燥地の植生と砂漠化. 日本緑化学会、37(4)、460–461.]
- Fujimaki, H., Buhe, Amano, T. and Inoue, M. (Jun. 2012): Numerical simulation of water flow and solute transport in dune sand under subsurface drip irrigation. Sand Dune Research, 59, 1–10. [藤巻晴行・布和・天野貴久・井上光弘 (2012年6月) : 砂丘砂における地中点滴灌漑下の水分溶質移動の数値解析. 日本砂丘学会誌、59, 1–10.]
- Habora, M.E.E., Eltayeb, A.E., Oka, M., Tsujimoto, H. and Tanaka, K. (Mar. 2013): Cloning of allene oxide cyclase gene from *Leymus mollis* and analysis of its expression in wheat-Leymus chromosome addition lines. Breeding Science, 63, 68–76.
- Han, L., Tsunekawa, A. and Tsubo, M. (May 2012): Active and passive microwave remote sensing of springtime near-surface thaw at midlatitudes. IEEE Geoscience and Remote Sensing Letters, 9, 427–431.
- Hanada, K., Higuchi-Takeuchi, M., Okamoto, M., Yoshizumi, T., Shimizu, M., Nakaminami, K., Nishi, R., Ohashi, C., Iida, K., Tanaka, M., Horii, Y., Kawashima, M., Matsui, K., Toyoda, T., Shinozaki, K., Seki, M., and Matsui, M. (Feb. 2013): Small coding genes associated with morphogenesis are hidden in plant genomes. Proceedings of the National Academy of Science of the United States of America, 110, 2395–2400.
- Haregeweyn, N., Berhe, A., Tsunekawa, A., Tsubo, M. and Meshesha, D. (Dec. 2012): Integrated watershed management as an effective approach to curb land degradation: a case study of the Enabered watershed in northern Ethiopia. Environmental Management, 50, 1219–1233.
- Haregeweyn, N., Fikadu, G., Tsunekawa, A., Tsubo, M. and Meshesha, D. (May 2012): The dynamics of urban expansion and its impacts on land use/land cover change and small-scale framers living near the urban fringe: a case study of Bahir Dar, Ethiopia. Landscape and Urban Planning, 106, 149–157.
- Haregeweyn, N., Negash, A., Tsunekawa, A., Tsubo, M. and Meshesha D.T. (Feb. 2013): Analysis of the invasion rate, impacts and control measures of *Prosopis juliflora*: a case study of Amibara District, East Ethiopia.

- Journal of Environmental Monitoring and Assessment, 185, 7527–7542.
- Hoshino, B., Karamalla, A., Abd Elbasit, M.A.M., Manayeva, K., Yoda, K., Suliman, M. Elgamri, M., Nawata, H. and Yasuda, H. (Jun. 2012): Evaluating the invasion strategic of Mesquite (*Prosopis juliflora*) in Eastern Sudan using remotely sensed technique. Journal of Arid Land Studies, 22, 1–4.
- Imada, S., Acharya, K. and Yamanaka, N. (May 2012): Short-term and diurnal patterns of salt secretion by *Tamarix ramosissima* and their relations with climate conditions. Journal of Arid Environment, 83, 62–68.
- Inosako, K., Kozaki, S., Inoue, M. and Saito, T. (Nov. 2012): Quantitative features of soil water collected by container wick sampler in bare sand dune field. Sand Dune Research, 59, 51–60. [猪追耕二・古崎智子・井上光弘・齋藤忠臣 (2012年11月)：砂丘裸地圃場におけるコンテナウイックサンプラーの土壤水採取特性. 日本砂丘学会誌、59, 51–60.]
- Inosako, K., Yasunaga, K., Takeshita, N., Saito, T. and Inoue, M. (Jun. 2012): Desalinization of a salt-affected field using a rice husk underdrainage system. Journal of Arid Land Studies, 22, 143–146.
- Inthavong, T., Tsubo, M. and Fukai, S. (Sep. 2012): Soil clay content, rainfall and toposequence positions determining spatial variation in field water availability as estimated by a water balance model for rainfed lowland rice. Crop and Pasture Science, 63, 529–538.
- Ishii, T., Matsumoto, N., Tanaka, H., Eltayeb, A.E. and Tsujimoto, H. (Jun. 2012): Evolution of subtelomeric and centromeric repetitive sequences in genus *Pennisetum* (Poaceae). Chromosome Science, 15, 53–59.
- Ishii, T., Tanaka, H., Eltayeb, A.E. and Tsujimoto, H. (Mar. 2013): Wide hybridization between oat and pearl millet belonging to different subfamilies of Poaceae. Plant Reproduction, 26, 25–32.
- Ishikawa, Y., Fukushima, J., Sakurai, K., Niu, S., Wang, S., Inoue, M., Shoji, T., Hayakawa, A. and Hidaka, S. (Jun. 2012): Effect of sulfur-humic acid on agricultural production including grape growth on saline-alkali soil in Gansu province, P.R.China. Journal of Arid Land Studies, 22, 103–106.
- Ishizuka, M., Mikami, M., Yamada, Y., Kimura, R., Kuro-saki, Y., Jugder, D., Gantsetseg, B., Cheng, Y. and Shinoda, M. (Nov. 2012): Does ground surface soil aggregation affect transition of the wind speed threshold for saltation and dust emission? SOLA, 8, 129–132.
- Ito, T.Y., Lhagvasuren, B., Tsunekawa, A., Shinoda, M., Takatsuki, S., Buuveibaatar, B. and Chimeddorj, B. (Feb. 2013): Fragmentation of the habitat of wild ungulates by anthropogenic barriers in Mongolia. PLoS ONE, 8, e56955.
- Jugder, D., Shinoda, M., Sugimoto, N., Matsui, I. and Nishikawa, M. (2012): Dust concentrations of PM10 and PM2.5 in the Gobi Desert of Mongolia during dust storm periods, Journal of the Problems of Geography (Problems of Meteorology, Hydrology and Ecology), No. 375 (12 B), 49–58. (in Mongolian)
- Jugder, D., Sugimoto, N., Shinoda, M., Kimura, R., Matsui, I. and Nishikawa, M. (Jul. 2012): Dust, biomass burn-ing smoke, and anthropogenic aerosol detected by polarization-sensitive Mie lidar measurements in Mongolia. Atmospheric Environment, 54, 231–241.
- Kato, H., Kimura, R., Elbeih, S.F., Iwasaki, E. and Zaghloul, E.A. (Nov. 2012): Land use change and crop rotation analysis of a government well district in Rashda village - Dakhla Oasis, Egypt based on satellite data. The Egyptian Journal of Remote Sensing and Space Science, 15, 185–195.
- Kawaguchi, S., Iida, K., Harada, E., Hanada, K., Matsui, A., Okamoto, M., Shinozaki, K., Seki, M. and Toyoda, T. (Apr. 2012): Positional correlation analysis improves reconstruction of full-length transcripts and alternative isoforms from noisy array signals or short reads. Bioinformatics, 28, 929–937.
- Kimura, R. (May 2012): Factors contributing to dust storms in source regions producing the yellow-sand phenomena observed in Japan from 1993 to 2002. Journal of Arid Environments, 80, 40–44.
- Kimura, R. (Jun. 2012): Effect of the strong wind and land cover in dust source regions on the Asian dust event over Japan from 2000 to 2011. Science Online Letters on the Atmosphere, 8, 77–80.
- Kimura, R. (Nov. 2012): Relationship between the soil-water content using AMSR-E product and Asian dust event in dust-source regions from 2003 to 2011. Climate in Biosphere, 12, 59–64. [木村玲二 (2012年11月)：2003–2011年における黄砂発生源のAMSR-Eから得られた土壤水分と黄砂イベントとの関係. 生物と気象、12, 59–64.]
- Kinugasa, T., Tsunekawa, A. and Shinoda, M. (Nov. 2012): Increasing nitrogen deposition enhances post-drought recovery of grassland productivity in the Mongolian steppe. Oecologia, 170, 857–865.
- Kume, T., Otsuki, K., Du, S., Yamanaka, N., Wang Y.L. and Liu, G.B. (Apr. 2012): Spatial variation in sap flow velocity in semiarid region trees: its impact on stand-scale transpiration estimates. Hydrological Processes, 26, 1161–1168.
- Liang, Y., Lin, X., Yamada, S., Zhou, M., Inoue, M. and Inosako, K. (Jul. 2012): Cucumber productivity and soil degradation in re-cropping system in greenhouse. Communications in Soil Science and Plant Analysis, 43, 1743–1748.
- Matsushima, D., Kimura, R. and Shinoda, M. (Apr. 2012): Soil moisture estimation using thermal inertia: potential and sensitivity to data conditions. Journal of Hydrometeorology, 13, 638–648.
- Matsuura, A., Tsuji, W., An, P. and Inanaga, S. (Oct. 2012): Effect of pre- and post-heading water deficit on growth and grain yield of four millets. Plant Production Science, 15, 323–331.
- Meshesha, D.T., Tsunekawa, A., Tsubo, M. and Haregewyn, N. (Mar. 2012): Dynamics and hotspots of soil erosion and its management scenarios: the case of the Central Rift Valley of Ethiopia. International Journal of Sediment Research, 27, 84–99.
- Mu, H., Otani, S., Shinoda, M., Yokoyama, Y., Onishi, K., Hosoda, T., Okamoto, M. and Kurozawa, Y. (Mar. 2013): Long-term effects of livestock loss caused by

- dust storm on Mongolian inhabitants: A survey 1 year after the dust storm. *Yonago Acta Medica*, 56, 39–42.
- Murata, N., Iwanaga, F., Maimaiti, A., Mori, N., Tanaka, K., and Yamanaka, N. (Apr. 2012): Significant improvement of salt tolerance with 2-day acclimation treatment in *Elaeagnus oxycarpa* seedlings. *Environmental and Experimental Botany*, 77, 170–174.
- Nabeta, H. (Mar. 2013): The roles I would expect of a leading, regional university to play: views of a practitioner in African development cooperation. *Journal of Education Center, Organization for Supporting University Education of the Tottori University*, 18, 9–12. [鍋田肇 (2013年3月)：地域の拠点大学に期待したいこと／アフリカ支援実務家の視点。大学教育年報（鳥取大学教育支援機構）、第18号、9–12.]
- Nakano, T., Bauvudorjb, G., Urianhai, N.G. and Shinoda, M. (Mar. 2013): Monitoring aboveground biomass in semiarid grasslands using MODIS images. *Journal of Agricultural Meteorology*, 69, 33–39.
- Nandintsetseg, B. and Shinoda, M. (Mar. 2013): Assessment of drought severity and frequency, and impacts on pasture productivity in the Mongolian steppe. *Natural Hazards*, 66, 995–1008.
- Okada, A., Ito, T.Y., Buuveibaatar, B., Lhagvasuren, B. and Tsunekawa, A. (Dec. 2012): Genetic structure of Mongolian gazelle (*Procapra gutturosa*): the effect of railroad and demographic change. *Mongolian Journal of Biological Sciences*, 10, 59–66.
- Shi, W.Y., Zhang, J.G., Yan, M.J., Yamanaka, N. and Du, S. (Sep. 2012): Seasonal and diurnal dynamics of soil respiration fluxes in two typical forests on the semiarid Loess Plateau of China: Temperature sensitivities of autotrophs and heterotrophs and analyses of integrated driving factors. *Soil Biology & Biochemistry*, 52, 99–107.
- Shinchilelt, B., Cheng, Y. and Nakamura, T. (Mar. 2013): Relationships between the species composition of steppe vegetation and environmental factors in Mid-western Kazakhstan. *Journal of Arid Land Studies*, 22, 463–472.
- Shuyskaya, E., Rajabov, T., Matuo, N., Toderich, K., Gis-matullina, L., Voronin P. and Yamanaka N. (Jun. 2012): Seasonal dynamics of asiatic desert C3/C4 species related to landscape planning and rehabilitation of salt affected lands. *Journal of Arid Land Studies*, 22, 77–82.
- Tachiiri, K. and Shinoda, M. (Nov. 2012): Impact of future climate change on summer droughts and snow disasters in Mongolia. *SOLA*, 8, 124–128.
- Takemoto, T., Kataoka, R., Yamanaka, T. and Taniguchi, T. (May 2012): Various microorganisms around the tree roots. *Forest Science*, 65, 16–20. [竹本周平・片岡良太・山中高史・谷口武士 (2012年5月)：樹木の根を取りまく様々な微生物。森林科学、Vol. 65、16–20.]
- Taniguchi, T., Usuki, H., Kikuchi, J., Hirobe, M., Miki, N., Fukuda, K., Zhang, G., Wang, L., Yoshikawa, K. and Yamanaka, N. (Aug. 2012): Colonization and community structure of root-associated microorganisms of *Sabina vulgaris* with soil depth in a semiarid desert ecosystem with shallow groundwater. *Mycorrhiza*, 22, 419–428.
- Tasumi, M. and Kimura, R. (Feb. 2013): Estimation of volumetric soil water content over the Liudaogou river basin of the Loess Plateau using the SWEST method with spatial and temporal variability. *Agricultural Water Management*, 118, 22–28.
- Tsegaye, A., Adgo, E. and Selassie, Y.G. (Dec. 2012): Impact of land certification on sustainable land resource management in dryland areas of eastern Amhara region, Ethiopia. *Journal of Agricultural Science*, 4.
- Yanagawa, A. and Fujimaki, H. (Mar. 2013): Tolerance of canola to drought and salinity stresses in terms of root water uptake model parameters. *Journal of Hydrology and Hydromechanics*, 61, 73–80.
- Yasuda, H., Abd Elbasit, M.A.M., Inoue, M., Yoda, K., Kawai, T., Tsuji, W., Nawata, H. and Saito, T. (Oct. 2012): Groundwater uptake of alien invasive plant, diurnal groundwater level fluctuation due to the midday depression phenomenon. *Journal of Japan Society of Hydrology and Water Resources*, 25, 315–321. [安田裕・Abd Elbasit, M.A.M.・井上知恵・依田清胤・河合隆行・辻渉・繩田浩志・齊藤忠臣 (2012年10月)：乾燥環境下における外来侵入種メスキートの地下水吸水一日中低下現象による地下水位日変動のダブルピーク・パターン。水文・水資源学会誌、25、315–321.]
- Yasuda, H., Berndtsson, R., Hinokidani, O., Huang, J., Saito, T., Zheng, J. and Kimura, R. (Jan. 2013): The impact of plant water uptake and recharge on groundwater level at a site in the Loess Plateau of China. *Hydrology Research*, 44, 106–116.
- Yasuda, H., Kawai, T., Mohamed Ahamed, M.A.E. and Nawara, H. (Sep. 2012): Seasonal variation of rainfall time series in arid Sudan. *Journal of Arid Land Study*, 22, 357–361. [安田裕・河合隆行・Mohamed Abd Elbasit Mohamed Ahmed・繩田浩志 (2012年9月)：乾燥地スーザンにおける降水量時系列の季節変動について。沙漠研究 22、357–361.]
- Yasuda, H., Kawai, T., Mohamed Ahamed, M.A.E. and Nawata, H. (Sep. 2012): Periodical characteristics of precipitation time series in arid Sudan. [安田裕・河合隆行・Mohamed Abd Elbasit Mohamed Ahmed・繩田浩志 (2012年9月)：乾燥地スーザンにおける降水量時系列の周期特性について。沙漠研究、22、363–367.]
- Yoda, K., Abd Elbasit, M.A.M., Hoshino, B., Nawata, H. and Yasuda, H. (Jun. 2012): Root system development of *Prosopis* seedling under different soil moisture conditions. *Journal of Arid Land Studies*, 22, 13–16.
- Zhang, J., Liu, G., Xu, M., Xu, M. and Yamanaka, N. (Feb. 2013): Influence of vegetation factors on biological soil crust cover on rehabilitated grassland in the hilly Loess Plateau, China. *Environmental Earth Sciences*, 68, 1099–1105.
- Zhang, J., Taniguchi, T., Tateno, R., Xu, M., Du, S., Liu, G. B. and Yamanaka, N. (Mar. 2013): Ectomycorrhizal fungal communities of *Quercus liaotungensis* along local slopes in the temperate oak forests on the Loess Plateau, China. *Ecological Research*, 28, 297–305.

Zheng, M., Lai, L., Jiang, L., An, P., Yu, Y., Zheng, Y., Shimizu, H., Baskin, J.M. and Baskin, C.C. (Nov. 2012): Moderate water supply and partial sand burial increase relative growth rate to two *Artemisia* species in an inland sandy land. Journal of Arid Environments, 85, 105–113.

Books/ Book Chapters

- Abd Elbasit, M.A.M., Yasuda, H. and Salmi, A. (2012): Rainfall erosivity measurement and evaluation: Potential of piezoelectric transducers under Tottori, Japan rainfall. In Martin O.E. and Roberts T.M. eds. Rainfall: Behavior, Forecasting and Distribution. NOVA Publisher, New York, 137–153. (ISBN: 978-1-62081-551-9)
- Morii, T., Inoue, M., Komatsu, G., Kadoguchi, R. and Takeshita, Y. (Mar. 2012): Effective water harvesting using capillary barrier of unsaturated soils, In Jotsankasa, Sawangsuriya, Soralump and Mairaing eds. Unsaturated Soils, Theory and Practice 2011. Kasetsart University, Thailand, 857–860. (ISBN 978-616-7522-77-7)
- Ogbonnaya, F.C., Abdalla, O., Mujeeb-Kazi, A., Kazi, A.G., Xu, S.S., Gosman, N., Lagudah, E.S., Bonnett, D., Sorrells, M.E. and Tsujimoto, H. (Mar. 2013): Synthetic hexaploids: Harnessing species of the primary gene pool for wheat improvement, In Janick J. ed. Plant Breeding Reviews 37. Wiley Blackwell, New Jersey, 35–122. (ISBN: 978-1-118-49785-2)
- Sato, R., Nawata, H., Buhei, A., Nagasawa, R., Jia, R., Zhang, W., Hou, Q. and Yamanaka, N. (Sep. 2012): Traditional Land Use on the Loess Plateau (China) and the “Grain-for-Green” Project: a Case from Ansai, Shanxi, In Zheng, X. ed. Current problems of environment and its cultural background, 中国書籍出版社, 76–110. (ISBN 978-7-5068-2625-9)
- Shinoda, M. (Sep. 2012): Climate and vegetation, In Obiya, C., Kitagawa, S., and Sohma, H. eds. Central Asia. World Geography Series, Vol. 5, Asakura Shoten, Tokyo, 15–19. (ISBN 978-4-254-16795-5) [篠田雅人 (2012年9月)：気候と植生環境、帯谷知可・北川誠一・相馬秀廣編「中央アジア」。世界地理講座 第5巻、朝倉書店、東京、15–19.]
- Taniguchi, T. (Apr. 2012): Chapter 3 Fungi influence the establishment of plants, In Futai, K. ed. Invitation to microbial ecology. Kyoto University Press, Kyoto, 41–58. (ISBN 978-4876985975) [谷口武士 (2012年4月)：第3章 植物の定着に関わる菌類、二井一 謹ら編 「微生物生態学への招待」。京都大学学術出版会、京都、41–58.]

2.2 会議・シンポジウム・学会発表/Conference/ Symposium/ Presentations

International (国際)

- Abd Elbasit, M.A.M., Ojha, C.S.P. and Yasuda, H. (Jun. 2012): Rainfall erosivity under arid land environment. The 1st International Symposium on R&D in Drylands, Khartoum, Sudan.
- Abd Elbasit, M.A.M., Yasuda, H. and Salmi, A. (Mar. 2013): Piezoelectric transducer for rainfall erosivity evaluation under Tottori, Japan environment. The 2nd International Conference on Engineering and Applied Science, Tokyo, Japan.
- Babiker, A.E., Abd Elbast, M.A.M., Elnasikh, M.H. and Yasuda, H. (Jun. 2012): Performance of dielectric sensor for soil moisture measurement under arid land environment. The 1st International Symposium on R&D in Drylands, Khartoum, Sudan.
- Cho, S.-W., Eltayeb, A.E. and Tsujimoto, H. (Mar. 2013): Toward to produce perennial wheat using wild species for breeding in arid land, "Global Climate Change and its Impact on Food & Energy Security in the Drylands". 11th International Conference on Development of Drylands, Beijing, China.
- Dingaan, M., Walker, S., Newby, T. and Tsubo, M. (Jan. 2013): Plant species richness, soil properties and grazing effects in semi-arid grassland of South Africa. The 39th Annual Conference of the South African Association of Botanists: Green in Gold, Drakensberg, South Africa.
- Dingaan, M.N.V., Tsubo, M., Walker, S. and Newby, T.S. (Jul. 2012): Biodiversity and edaphic factors in grasslands of the Free State, South Africa. The 47th Annual Congress of the Grassland Society of Southern Africa: Advancing Rangeland Ecology and Pasture Management in Africa, Langebaan, South Africa.
- Du, S., Zhang, J.G., Guan, J.H., Otsuki, K. and Yamanaka, N. (Sep. 2012): Water use properties of typical forestation species in the semiarid Loess Plateau of China. 3rd International Conference on Forest & Water in a Changing Environment, Fukuoka, Japan.
- Eltayeb, A.E., Habora, M.E.E., Tsujimoto, H. and Tanaka, K. (Mar. 2013): Effects of over-expressing of rice glycogenin-like protein (OsGGT1) on tolerance to complete submergence and drought stress. "Global Climate Change and its Impact on Food & Energy Security in the Drylands". 11th International Conference on Development of Drylands, Beijing, China.
- Fujimaki, H. and Sayed, S. (Oct. 2012): Drought and salinity tolerances of castor oil plant. ASA, CSSA, & SSSA 2012 International Annual Meetings, Cincinnati, USA.
- Habora, M.E.E., Eltayeb, A.E., Tsujimoto, H. and Tanaka, K. (Jul. 2012): Identification and characterization of allene oxide cyclase in *Leymus mollis* and its expression analysis in wheat-Leymus chromosome addition lines. Plant Biology Congress, Freiburg, Germany.
- Habora, M.E.E., Eltayeb, A.E., Tsujimoto, H. and Tanaka, K. (Jan. 2013): Lipoxygenase and allene oxide cyclase from *Leymus*: Cloning and expression analysis in wheat-Leymus chromosome addition lines. International Plant and Animal Genome XXI, San Diego, USA.
- Habora, M.E.E., Eltayeb, A.E., Tsujimoto, H. and Tanaka, K. (Mar. 2013): Genes involved in cross-tolerance to drought and salinity in *Leymus*: Identification and expression analysis in wheat-Leymus chromosome addition lines. "Global Climate Change and its Impact on Food & Energy Security in the Drylands". 11th International Conference on Development of Drylands, Beijing, China.
- Imada, S., Acharya, K., Tateno, R. and Yamanaka, N. (Dec. 2012): Leaf nutrient contents and morphology of invasive tamarisk in different soil conditions in the lower Virgin River. 2012AGU, San Francisco, USA.
- Inoue, T. (Mar. 2013): Association mapping of agronomic traits on *Jatropha curcas*. 6th International Symposium on "Green Biotechnology for Global Sustainability", Osaka, Japan.
- Inoue, T., Yamauchi, Y., Eltayeb, A.A., Samejima, H., Babiker, A.G.T. and Sugimoto, Y. (Jun. 2012): Gas exchange and stomatal response of root parasitic weed *Striga hermonthica* and sorghum under water stress. 8th International Society of Root Research, Dundee, Scotland, UK.
- Inoue, T., Yamauchi, Y., Eltayeb, A.A., Samejima, H., Ueno, K., Babiker, A.G.E. and Sugimoto, Y. (Sep. 2012): Translocation of host materials to parasite: Stomatal response and photosynthetic capacity of *Striga hermonthica* and sorghum under water stress. International Seminar on SATREPS Project on Striga Management, Khartoum, Sudan.
- Jugder, D., Shinoda, M., Sugimoto, N., Matsui, I. and Nishikawa, M. (Sep. 2012): Dust concentrations of PM10 and PM2.5 in the Gobi Desert of Mongolia during dust storm periods. Conference on Problems on Hydrology, Meteorology and Ecology for the 70th Anniversary of the National University of Mongolia and the 50th Anniversary of the Department of Meteorology and Hydrology, Ulaanbaatar, Mongolia.
- Jugder, D., Sugimoto, N., Shinoda, M., Matsui, I. and Nishikawa, M. (Oct. 2012): Dust detected by polarization-sensitive Mie lidar measurements in Mongolia. The 18th International Joint Seminar on Regional Deposition Processes in the Atmosphere and Climate Change, Ulaanbaatar, Mongolia.
- Kawai, T., Tada, Y., Shinoda, M., Tsuchiya, R., Morii, T., Suzuki, T. and Tseedulam, K. (Dec. 2012): New method of groundwater exploration by groundwater aeration sound in arid land. Conference on Geology in Mongolia, Ulaanbaatar, Mongolia.
- Kimura, R. (Sep. 2012): Climatic features in Rashda village and detection of cultivation pattern and water use using satellite data. The 4th Egyptian Japanese Joint Symposium on Remote Sensing and Its Application; From Archaeology To Social Sciences, Cairo, Egypt.
- Koguchi, N., Okada, Y., Yamamoto F. and Yamanaka N. (Sep. 2012): Betaine accumulation in salt-stressed *Salix psammophila* and *S. matsudana* cuttings. 3rd International Conference on Forest & Water in a Changing Environment, Fukuoka, Japan.
- Koguchi, N., Okada, Y., Yamamoto, F. and Yamanaka, N.

- (Nov. 2012): Salinity tolerance and osmoregulation of salt-stressed *Salix psammophila* and *S. matsudana* cuttings. The 9th International Symposium between Japan & Korea, Daejeon, Korea.
- Kuroski, Y. (Aug. 2012): Changes in erodibility for wind erosion over East Asia for the recent two decades (from 1990s to 2000s). Khovd Seminar 2012 "Climate Change: Ecosystem for High Mountain Regions" hold by NAMEM (National Agency for Meteorology and Environment Monitoring), IMHE (Institute for Meteorology, Hydrology, and Environment), Khovd Aimag, and Khovd City, Khovd, Mongolia.
- Li, R., Tsunekawa, A. and Tsubo, M. (Mar. 2013): Drought assessment in a typical rainfed agricultural region of Inner-Mongolia, China. The 11th International Conference on Development of Drylands: Global Climate Change and its Impact on Food & Energy Security in the Drylands, Beijing, China.
- Mandai, A., Tomemori, H., Tsuji, W., Tsujimoto, H., Tsunekawa, A., Tsuchimoto, S., Sakai, H., Cartagena, J. and Fukui, K. (Mar. 2013): Evaluation of transgenic jatropha plants for drought tolerance, International Symposium Green Biotechnology for Global Sustainability, Osaka, Japan.
- Mohamed, A.A., Kimura, R. and Shinoda, M. (Mar. 2013): Validating the moisture availability index (NTDI) over vegetated land in Central Asia. 11th International Conference on Development of Drylands, Beijing, China.
- Mohammed, Y.S., Eltayeb, A.E. and Tsujimoto, H. (Mar. 2013): Cancelation of vernalization and promotion of early flowering in wheat using chromosomes added from the wild relative *Leymus racemosus*. 11th International Conference on Development of Drylands, Beijing, China.
- Morinaga, Y., Shinoda, M., Takatsuki, S. and Chuluun, J. (Aug. 2012): Traditional knowledge of seasonal camp selection in Mongolia. The Eighth International Conference on Environment and Sustainable Development in Mongolian Plateau and Surrounding Regions, Ulaanbaatar, Mongolia.
- Nabeta, H. (Mar. 2013): Experiences of governments/JICA/Tottori-University tripartite cooperation in capacity development on dry land agricultural technologies. 11th International Drylands Development Conference (IDDC), Beijing, China.
- Nandintsetseg, B. and Shinoda, M. (May 2012): Ecosystem modeling for a temperate grassland wind-erosion scheme. Japan Geoscience Union Meting 2012, Chiba, Japan.
- Nandintsetseg, B. and Shinoda, M. (Dec. 2012): Analysis of meteorological and pasture droughts, and their impact on pasture production in the Mongolian steppe. Conference on Scientific Reading: Faces of the Four Seasons and Innovation, Ulaanbaatar, Mongolia.
- Nandintsetseg, B. and Shinoda, M. (Dec. 2012): Simulating soil moisture and vegetation dynamics under different grazing conditions in a Mongolian temperate grassland. Soil Moisture Workshop 2012, Tokyo, Japan.
- Nandintsetseg, B., Shinoda, M. and Shao, Y. (Oct. 2012): Modeling interactions between vegetation and aeolian processes in the Mongolian temperate grasslands. The 18th International Joint Seminar on Regional Deposition Processes in the Atmosphere and Climate Change, Ulaanbaatar, Mongolia.
- Okada, Y., Mao H., Koguchi, N., Yamanaka, N. and Yamamoto, F. (Nov. 2012): Study on adjustment capacity of plant in Mu Us Sandland, Inner Mongolia, China. The 9th International Symposium between Japan & Korea, Daejeon, Korea.
- Okazaki, M., Kamel, N., Fujimaki, H. and Fathia, M. (Mar. 2013): Yield and water use efficiency of barley under different irrigation scheduling methods in southern Tunisia. 11th International Conference on Deuelopment of Drylands, Beijin, China.
- Shinoda, M., Nandintsetseg, B., Nachinshonhor, U.G. and Komiyama, H. (Aug. 2012): Measuring sensitivity and resilience of vegetation to drought. The Eighth International Conference on Environment and Sustainable Development in Mongolian Plateau and Surrounding Regions, Ulaanbaatar, Mongolia.
- Tachiiri, K., Shinoda, M., Morinaga, Y., Koike, T., Erdenetsetseg, B. and Komiyama, H. (Mar. 2013): Extreme weather that led to historic Mongolian livestock mortality during the 2009–2010 winter. International Symposium on Agricultural Meteorology 2013, Hokuriku, Japan.
- Taniguchi, T., Allen, M.F., Douhan, G.W., Kitajima, K. and Yamanaka, N. (Jan. 2013): Effect of summer rain pulse on ectomycorrhizal community of *Quercus kelloggii* in California mixed-conifer forest. 7th International Conference on Mycorrhiza, New Deli, India.
- Tasumi, M., Kimura, R., Moriyama, M., Allen, R.G. and Fujii, A. (Oct. 2012): Estimation of global ET-index from satellite imagery for water resources management. 2012 Asia-Pacific Remote Sensing, Kyoto, Japan.
- Tsuji, W., Kuma, S., An, P. and Tsunakawa, A. (Mar. 2013): Effects of mixed-planting with legume species and mycorrhizal fungi inoculation on nutrient and water uptake in *Jatropha curcas* L. 6th International Symposium of Green Biotechnology for Global Sustainability, Osaka, Japan.
- Tsunekawa, A. (Mar. 2013): Renewable energy for rural development in drylands. 11th International Conference on Dryland Development , Beijing, China.
- Yamanaka, N., Miyazaki, M., Otsuki, K., Hou, Q.C., Du, S. and Yamamoto F. (Sep. 2012): Differences in drought tolerance among woody plants in Loess Plateau, China. 3rd International Conference on Forest & Water in a Changing Environment, Fukuoka, Japan.
- Yamanaka, N., Wang, HX., Nagayama, Y., Sano, J., Zhou, ZQ., Zou, XZ. and Tamai, S. (Mar. 2013): Stand structure of oak forests in Liaoning Province, China. 11th International Conference on Dryland Development, Beijing, China
- Yasuda, H. and Abd Elbasit, M.A.M. (Jun. 2012): Inter-action between mesquite and groundwater. The 1st International Symposium on R&D in Drylands, Khartoum, Sudan.

Domestic (国内)

- Ailijiang, M., Iwanaga, F., Matsuo, N. and Yamanaka, N. (Mar. 2013): Contrasting osmolyte accumulation strategies in halophytes growing in saline habitat. 第 60 回日本生態学会大会、静岡。
- Akaji, Y., Hirobe, M., Harada, M., Otoda, T., Yamanaka, N. and Sakamoto, K. (Mar. 2013): Microphysical environmental controls on local variation in dwarf bamboo (*Sasa palmata* Nakai) distribution in a cool- temperate deciduous broad-leaved forest in Japan. 第 60 回日本生態学会大会、静岡。
- He, Y., Zheng, M., Kajiwara, S. and An, P. (Sep. 2012): Effect of freezing-thawing of saline irrigation water on soil desalination. 日本砂丘学会第 58 回全国大会、徳島。
- Kim, D.-E., Abu Hena, M.K., Cho, K., Cho, S.-W, Kim, K.-H., Park, C.H.-S., Choi, J.-S., Chung, K.-Y. and Woo, S.-H. (Sep. 2012): Mitochondrial proteomics analysis in wheat root. 日本育種学会第 122 回講演会、京都。
- Mohammed, Y.S.A., Eltayeb, A.E., and Tsujimoto, H. (Mar. 2013): Enhancement of wheat tolerance to aluminum by adding chromosomes from the wild wheat-relative *Leymus racemosus*. 日本育種学会第 123 回講演会、東京。
- Nandintsetseg, B. (May 2012): Ecosystem modeling for a temperate grassland wind-erosion scheme. Japanese Geoscience Union Meeting 2012, Tokyo, Japan.
- Zhang, J., Liu, G. and Yamanaka, N. (Mar. 2013): The effect of vegetation restoration models on the distribution of soil nutrients on the Loess Plateau, China. 第 60 回日本生態学会大会、静岡。
- 飯島慈裕・篠田雅人（2012 年 12 月）：気候傾度に沿ったカザフスタン-モンゴルステップトランセクトにおける草原生態系変動。鳥取大学乾燥研究センター共同研究発表会、鳥取。
- 石井孝佳・砂村直洋・エリタエブアミン E・辻本壽（2012 年 10 月）：ムギ類とパールミレットの超遠縁雜種胚の染色体における CENH3 の挙動。染色体学会第 63 回年会、旭川。
- 石井孝佳・砂村直洋・上田登史恵・エリタエブアミン E・辻本壽（2013 年 3 月）：ムギ類とパールミレットの亜科間交雑における雌雄の動原体ヒストン〈CENH3〉の挙動と染色体脱落の関係。日本育種学会第 123 回講演会、東京。
- 石塚正秀・三上正男・山田豊・木村玲二・黒崎泰典・Jugder D.・篠田雅人（2012 年 10 月）：地表面のクラスト崩壊とダスト発生との関係。日本気象学会 2012 年度秋季学術大会、札幌。
- 伊藤健彦・程云湘・浅野眞希・Narangerel Ts.・Undarmaa J. (2012 年 9 月) : モンゴル・グレートゴビ A 厳重保全地域における絶滅危惧哺乳類による種子散布。日本哺乳類学会 2012 年度大会、相模原。
- 伊藤健彦・程云湘・浅野眞希・Narangerel Ts.・Undarmaa J. (2013 年 3 月) : モンゴル・グレートゴビ A 厳重保全地域の植生と絶滅危惧哺乳類による種子散布。日本生態学会第 60 回大会、静岡。
- 井上光弘・齊藤広隆・森井俊広・藤巻晴行（2012 年 11 月）：数値計算によるキャピラリーバリアの評価。2012 年土壤物理学会大会、十勝。
- 井上美那・香口成美・立石麻紀子・谷口武士・山本福壽・山中典和（2013 年 3 月）：海水による冠水が東日本太平洋沿岸域に分布する樹種の生理・生存におよぼす影響 I 枯死過程。第 124 回日本森林学会大会、岩手。
- 今井駿輔・伊藤健彦・衣笠利彦・恒川篤史・篠田雅人・Lhagvasuren B. (2012 年 5 月) : モウコガゼルの年間行動面積と植生指数の関係。中国四国地区生物系三学会合同大会島根大会、松江。
- 今井駿輔・伊藤健彦・衣笠利彦・恒川篤史・篠田雅人・Lhagvasuren B. (2012 年 9 月) : モウコガゼルの年間行動面積の地域差と植生条件の関係。日本哺乳類学会 2012 年度大会、相模原。
- 今井駿輔・伊藤健彦・衣笠利彦・恒川篤史・篠田雅人・Lhagvasuren B. (2013 年 3 月) : モウコガゼルの長距離移動は季節移動型か遊動型か？日本生態学会第 60 回大会、静岡。
- 岩永史子・今田省吾・Acharya K.・山中典和（2013 年 3 月）アメリカ西部モハベ砂漠に生育する植物の浸透調整物質と季節変動。第 60 回日本生態学会大会、静岡。
- 額爾德尼・大手信人・田中（小田）あゆみ・岡安智生・大黒俊哉・山中典和・Undarmaa J.・吉川賢（2012 年 5 月）：衛星リモートセンシングを用いたモンゴル国マンダルゴビ地域における植生の長期変動と空間分布について。日本沙漠学会第 23 回学術大会、帯広。
- 遠藤いず貴・田中（小田）あゆみ・大手信人・額爾德尼・Undarmaa J.・山中典和・岡安智生・大黒俊哉・那沁・廣部宗・吉川賢（2013 年 3 月）：モンゴル国の乾燥地における草本性 “Key-resource” 群落の水分と養分の利用特性。第 124 回日本森林学会大会、盛岡。
- 岡崎正泰・藤巻晴行・西原英治・井上光弘・齊藤忠臣（2012 年 9 月）：植物の生長モデルと天気予報を利用した灌漑水量の決定。平成 24 年度農業農村工学会大会、札幌。
- 長田和雄・谷口武士・黒崎泰典・篠田雅人・山中典和（2012 年 12 月）：日本における黄砂の沈着量の観測～2008 年 10 月～2010 年 12 までの結果から～。鳥取大学乾燥研究センター共同研究発表会、鳥取。
- 小瀬雄太・松尾奈緒子・岩永史子・エリジャンマイマイティ・山中典和（2013 年 3 月）：窒素安定同位体比を用いた土壤塩類集積地における塩生植物と土壤間の窒素循環の解明。第 60 回日本生態学会大会、静岡。
- 鹿島薰・Orkhonselenge A.・Ganzorig U.・福本侑・篠田雅人（2012 年 12 月）：モンゴルにおける水資源環境の長期的変動の復元。鳥取大学乾燥研究センター共同研究発表会、鳥取。
- 糟谷哲史・齊藤忠臣・河合隆行・財原大地・猪迫耕二・安田裕・塙崎一郎（2012 年 9 月）：鳥取砂丘オアシスの発生消滅メカニズムと涵養源の解明。日本砂丘学会第 58 回全国大会、徳島。
- 木村圭司・篠田雅人（2012 年 12 月）：夏季モンゴルにおける低気圧・前線の構造と降水量変動に関する研究。鳥取大学乾燥研究センター共同研究発表会、鳥取。
- 黒崎泰典（2012 年 10 月）：東アジアにおける黄砂増加と砂漠化。日本地理学会 2012 年秋季学術大会・シンポジウム「ゾドと遊牧知—乾燥地災害学の体系化

- に向けてー」、神戸。
- 黒崎泰典（2013年1月）：気象台データ、衛星画像、現地調査で見たモンゴルのダスト発生。日本沙漠学会・風送ダスト研究会「風送ダストに関する最近の話題と今後の展望」、春日。
- 黒崎泰典・篠田雅人・三上正男（2012年5月）：近年の東アジアにおける風送ダスト多発化の原因—気象台データを用いた解析。日本地球惑星科学連合2012年大会、千葉。
- 小池崇子・篠田雅人・森永由紀（2011年11月）：モンゴル北部ボルガン郡における近年の家畜大量死に関連する気象条件。平成24年度日本農業気象学会中国・四国支部大会、出雲。
- 香口成美・井上美那・立石麻紀子・谷口武士・山本福壽・山中典和（2013年3月）：海水による冠水が東日本太平洋沿岸域に分布する樹種の生理・生存におよぼす影響Ⅱ。樹体内的塩集積。第124回日本森林学会大会、盛岡。
- 香口成美・岡田憲和・山中典和・山本福壽（2012年9月）：中国乾燥地で植栽される旱柳と沙柳の耐塩性と浸透調整能。日本植物学会第76回大会、姫路。
- 香口成美・岡田憲和・山本福壽・山中典和（2012年10月）：旱柳と沙柳の浸透調整能におよぼすジャスモン酸処理の効果。第63回応用森林学会研究発表会、大津。
- 小松豊・篠田雅人・植田宏昭（2008年11月）：モンゴル東部における融雪時期の大気熱収支。日本気象学会2008年度秋季学術大会、仙台。
- 斎木拓郎・松尾奈緒子・野口よしの・宮田慎吾・谷口真吾・山中典和（2013年3月）：長短期塩分ストレスに対するヒルギダマシ (*Avicennia marina* (Forsk.) Vierh.) の葉の炭素・酸素安定同位体比の応答。第60回日本生態学会大会、静岡。
- 篠田雅人（2012年6月）：遊牧はなぜ3000年も続いてきたか？岐阜地理学会講演会、各務原。
- 篠田雅人（2012年10月）：趣旨説明。日本地理学会2012年秋季大会シンポジウム「ゾドと遊牧知—乾燥地災害学の体系化に向けてー」、神戸。
- 篠田雅人（2012年12月）：地球の気候はどのように変化してきたか。平成24年度鳥取大学乾燥地研究センター一般公開シンポジウム「今、世界の環境・農業は—乾燥地における鳥取大の研究と協力—」特別講演、鳥取。
- 篠田雅人（2013年3月）：黄砂発生源としての草原：ユーラシアの真中で考えた。日本生態学会第60回大会シンポジウム「気候変動に対する土壤生態系応答—グローバルおよび地域スケールにおけるモデル予測と現場研究のギャップを探るー」、静岡。
- 田川公太郎・黄金豊・赤松俊・李亜利・成松憲二郎・西村亮・木村玲二・藤巻晴行・猪迫耕二・井上光弘（2012年11月）：乾燥地における太陽光発電と節水灌漑を融合した作物栽培技術パッケージの開発—技術パッケージの実証試験。日本太陽エネルギー学会・日本風力エネルギー学会合同研究発表会、北九州。
- 立入郁・篠田雅人（2012年12月）：モンゴル草原地域における放牧圧の推定とその陸域生態系モデルへの導入。鳥取大学乾燥研究センター共同研究発表会、鳥取。
- 立石麻紀子・Maimaiti A.・辻将太・香口成美・井上美那・谷口武士・山本福壽・山中典和（2013年3月）：海水による冠水が東日本太平洋沿岸域に分布する樹種の生理・生存におよぼす影響Ⅲ。樹液流動態。第124回日本森林学会、盛岡。
- 立石麻紀子・松本一穂・谷口真吾・山中典和（2013年3月）：沖縄県に生育するマングローブ樹種の蒸散特性。第60回日本生態学会大会、静岡。
- 田中裕之・鍋内千里・辻本壽（2012年9月）：小麦粉生地を強くする *Thinopyrum elongatum* 由来高分子量グルテニンサブユニット遺伝子のパンコムギ実用品種への導入。日本育種学会第122回講演会、京都。
- 谷口武士・Allen M.・Douhan G.・Kitajima K.・山中典和（2013年3月）：半乾燥地における夏の降雨への外生菌根群集の反応。第60回日本生態学会大会、静岡。
- 辻本壽（2012年9月）：育種学教育の現状と展望、『育種における細胞遺伝学』からの課題と提案。日本育種学会第122回講演会、京都。
- 恒川篤史（2012年9月）：乾燥地における農業—乾燥地の特徴と乾燥地農学の役割—。日本土壤肥料学会2012年度鳥取大会：市民公開シンポジウム、鳥取。
- 程云湘（2012年1月）：中央アジア乾燥地の植生と砂漠化。日本綠化工学会 乾燥地綠化研究部会 第17回シンポジウム、横浜、招待講演。
- 中野智子・篠田雅人（2012年12月）：土壤の凍結・融解にともなうCO₂放出の測定—半乾燥草原におけるCO₂収支の通年の評価に向けてー。鳥取大学乾燥研究センター共同研究発表会、鳥取。
- 成松憲二郎・西村亮・中尾和樹・仲居康浩・田川公太郎・李亜利・木村玲二・藤巻晴行・猪迫耕二・井上光弘（2012年11月）：乾燥地における太陽光発電と節水灌漑を融合した作物栽培技術パッケージの開発—発電システムの構築と特性。日本太陽エネルギー学会・日本風力エネルギー学会合同研究発表会、北九州。
- 平野聰・森永由紀・篠田雅人（2012年5月）：モンゴル国における「遊牧知」の明確化に向けた一考察—冬營地の適地選定。沙漠学会2012年度春季大会、帯広。
- 松島大・木村玲二（2012年5月）：熱慣性を用いた土壤水分条件の推定とその応用。日本地球惑星科学連合2012年大会、千葉。
- 山中典和・Undarmaa J.・遠藤いづ貴・田中（小田）あゆみ・大手信人・額爾德尼・岡安智生・大黒俊哉・那沁・廣部宗・吉川賢（2013年3月）：モンゴル国の乾燥地における草本性“Key resource”群落の立地特性。第124回日本森林学会大会、盛岡。
- 吉原佑・伊藤健彦（2012年8月）：モンゴル草原における過放牧の生態系への影響と草原再生手法の提案。2012年度日本草地学会北海道大会、江別。

2.3 報告書／Reports

- 井上光弘（2012年11月）：特集・地域資源を利用した持続的農業、持続的農業のための水・土壤資源の利用と技術、—乾燥地の発展を目指してー。国際農林業協力、35(2)、2-11。
- 井上光弘・長澤尚胤・玉田正男（2012年11月）：研究資料・放射線加工技術による土壤改良材の開発と砂質土壤への応用。日本砂丘学会誌、59(2)、61-70。

2.4 公開セミナー／Open Seminar

1) Open seminar

1. Crop Production in Arid Lands (9 NOV 2012)

乾燥地における作物生産（2012年11月9日）

Shinobu INANAGA 稲永 忍

President, Institute of Technologists ものづくり大学学長

2. Integration of Traditional and Scientific Knowledge for Promoting Fermented Mare Milk (Airag: in Mongolia) Production (4 DEC 2012)

馬乳酒づくりの伝統的および科学的知識の統合（2012年12月4日）

Bat-Oyun TSERENPUREV バトユン ツェレンブル

School of Commerce Department of Commerce, Meiji University 明治大学商学部研究員

Mongolian nomads have their own unique tradition and wisdom in processing, fermenting and preserving livestock milk from the ancient time. *Airag* (fermented mare's milk) is one of Mongolian traditional milk products, which sustains the herders' nutrient especially during summer. *Airag* contains a lot of vitamins and minerals to recover the strength. Some peoples in the countryside take *airag* instead of meal in summer and autumn.

A preliminary study of questionnaire on *airag* production and consumption was conducted of a limited number of Mongolians for each province of Mongolia in June 2012. The major results are summarized as follows: Mapping of *airag* production (province scale) indicated that *airag* is neither produced nor consumed evenly over Mongolia. Horse population is concentrated on central and eastern Mongolia, while the *airag* production is concentrated on central Mongolia. Taste of *airag* differs depending on region, season, and even family. Thus, we asked a question of "What is the most important factor for making tasty *airag*?" Their answers are as follows: Vegetation productivity and type (palatable species) have positive effects on *airag* quantity and quality, respectively. Temperature condition; "lower temperature" is not suitable for the fermentation, while "higher temperature" also deteriorate the taste. Traditional skill, container and yeast are the most important factors to produce tasty *airag*. This preliminary study has strongly motivated us to conduct a further detailed study on a finer spatial scale (county scale).

3. Agricultural and Rural Life in Africa as Fields of Technical Transfer (1 FEB 2013)

技術協力の現場として見たアフリカの農業農村（2013年2月1日）

Yoshinori SHIMBO 新保 義剛

Tokai Regional Agricultural Administration Office, Ministry of Agr, Forestry and Fisheries 東海農政局

Based on his experience as a JICA long-term expert in Egypt, Nepal, and Zimbabwe and short term activity in Ethiopia, Eng. Shimbo, discussed how technical transfer of appropriate technology in upland farming should be.

Role of technical transfer in official development assistance (ODA) by Japanese government and some examples

such as construction of irrigation canal were presented. He also presented examples of appropriate technology he has introduced such as mixture farming, composting, or water harvesting. He told that Japanese experts are good at organization of farmers and agree making. He also stressed that a JICA long-term experts are expected to have wide knowledge on cropping in addition to their speciality such as irrigation or rural engineering.

4. Problems Yet to Be Solved for Salinization—Field Study for Sodic Soil in Heilongjiang, China—(25 FEB 2013)

塩類集積問題に残された課題—黒竜江省アルカリ土壤地帯における試行錯誤—（2013年2月25日）

Taku NISHIMURA 西村 拓

Laboratory of Soil Physics & Soil Hydrology, Graduate School of Agriculture and Sciences, the University of Tokyo 東京大学大学院農学生命科学研究科環境地水学研究室教授

5. Open Seminar on NERICA and Japan's Assistance for African Rice Development (26 MAR 2013)

アフリカ稲作支援に関わる日本人たち（2013年3月26日）

Yoshimi SOKAI¹, 惣慶 嘉

Takashi NANYA², 南谷 貴史

Takahiro NAKAMURA³ 中村 貴弘

1: Rice Expert, JICA Cameroon Office

2: Agriculture Expert, JICA Ivory Coast Office

3: Deputy Director, Agriculture and Rural Development Dept., JICA

Three experts lectured on: a) Origin, nomenclature and identification characteristics of NERICA rice varieties, its production potentials in different conditions and limitations; b) Prospects and challenges of NERICA dissemination in African countries; and, c) Context of Japan's assistance for the Coalition for African Rice Development (CARD) and its perspectives.

NERICA was developed by a team of WARDA (now AfricaRiceCenter) led by Dr. Monty Jones in the 1990's using an African rice strain (*O. glaberrima* Steud. CG 14) and Asian rice strain (*O. sativa* L. WAB 56-104) and is expressed as "WAB 56-104/CG 14//2*WAB 56-104". While NERICA varieties are widely believed to be more productive and resistant to dry conditions than their parent varieties, field experiment data don't necessarily support the conventional views. An advantageous trait of NERICA variety is early vegetative growth and shorter vegetation period. Promotion of NERICA cultivation need to be based on well-examined agro-ecological conditions and socio-economic situations of specific areas.

The Seminar was held on March 25th 2013 at the multi-purpose room of Tottori University's main library and attended by a total of 40 students and researchers.

2) Asian Dust Seminar

1st Asian Dust Seminar (19 APR. 2012)

1. Deposition of Kosa: all about DRAEMON (DRy And wEt deposition MOonitoring Network) results

黄砂の沈着：ドラエモン観測からわかったこと

Kazuo OSADA 長田 和雄
Graduate School of Environmental Studies, Department of
Earth and Environmental Sciences 名古屋大学大学院
環境学研究科地球環境変動論

2. Asian dust and microorganisms

黄砂と微生物

Takeshi TANIGUCHI 谷口 武士
Arid Land Research Center, Tottori University 鳥取大
学乾燥地研究センター

2nd Asian Dust Seminar (30 MAY 2012)

海外活動における NGO 団体のあり方と砂漠緑化技術
について
Eijiro HARA 原 鋭次郎
一般社会法人地球緑化クラブ代表

3rd Asian Dust Seminar (5 JUL. 2012)

**Aeolian Sediment Transport Research: Las Cruces,
New Mexico, Oceano & Keeler Dunes, California**
Jack GILLIES
Research Professor, Division of Atmospheric Sciences,
Desert Research Institute

4th Asian Dust Seminar (3 SEP. 2012)

砂塵に曝露された家畜の肺の病理解析
Akinori SHIMADA 島田 章則
Faculty of Agriculture, Tottori University 鳥取大学農
学部教授

5th Asian Dust Seminar (4 OCT. 2012)

'Desert loving Englishmen': Desert research at Oxford
Geography
Troy STERNBERG
School of Geography, Oxford University

6th Asian Dust Seminar (13 DEC. 2012)

リモートセンシング手法を用いたモンゴル高原地帯
における植生の長期変動
Eer deni 額爾德尼
東京大学大学院農学生命科学研究科研究員

7th Asian Dust Seminar (11 JAN. 2013)

1. モンゴル遊牧民の人々は何を食べているか?
—モンゴル栄養調査から
Yae YOKOYAMA 横山 弥枝
鳥取大学大学院医学研究科医学専攻・鳥取短期大学
生活学科食物栄養専攻助教
2. 黄砂とアレルギーマーチ
Shinji OTANI 大谷 真二
Faculty of Medicine, Tottori University 鳥取大学医学
部病態制御外科・鳥取大学乾燥地研究センター兼務
教員

8th Asian Dust Seminar (23 JAN. 2013)

1. 臭柏 (*Sabina vulgaris*) の異所的更新: 砂丘が流動
しなければ新しい群落は形成されない
Nobuhito OHTE 大手 信人
東京大学 大学院農学生命科学研究科准教授

2. モンゴル国における草本性 "Key resource"
群落の水分と養分の利用特性
Izuki ENDO 遠藤 いず貴
東京大学大学院農学生命科学研究科特任研究員

9th Asian Dust Seminar (5 FEB. 2013)

1. 気象庁の数値モデルを用いた地球環境業務
(黄砂、紫外線、二酸化炭素)
Takashi MAKI 真木 貴史
気象庁気象研究所

2. 気象庁黄砂予報モデル MARINGAR

Yasumichi TANAKA 田中 泰宙
気象庁気象研究所

3) Colloquium

1st Colloquium (30 NOV. 2012)

東アジア黄砂発生監視システムの開発と植生による
黄砂抑制効果の解明
Reiji KIMURA 木村 玲二
Arid Land Research Center, Tottori University 鳥取大
学乾燥地研究センター
乾燥地における植生と水文系の関係
Hiroshi YASUDA 安田 裕
Arid Land Research Center, Tottori University 鳥取大
学乾燥地研究センター
中国渤海湾地域における塩類集積土壤の農業利用
Ping AN 安 萍
Arid Land Research Center, Tottori University 鳥取大
学乾燥地研究センター
干ばつ早期警戒システムの開発
Mitsuru TSUBO 坪 充
Arid Land Research Center, Tottori University 鳥取大
学乾燥地研究センター
ナイルデルタにおける蒸発散量の節減と農業廃水の
有効利用をめざして
Haruyuki FUJIMAKI 藤巻 晴行
Arid Land Research Center, Tottori University 鳥取大
学乾燥地研究センター
バイオ燃料植物ジャトロファの取り組みとメキシコ
における導入の評価
Takayuki ANDO 安藤 孝之
Arid Land Research Center, Tottori University 鳥取大
学乾燥地研究センター

2nd Colloquium (6 MAR. 2012)

Using Organic Waste Materials as Soil Amendments
(有機質廃棄物の土壤改良材としての活用)
Andry Henintsoa RAVOLONANTENA
Arid Land Research Center, Tottori University
Effects of soil water conservation (SWC) on land productivity and farmers' income: A case study in Ethiopia
(土壤水保全が土地生産量および農家収入に及ぼす影響: エチオピアにおけるケーススタディ)
Enyew Adgo TSEGAYE
Arid Land Research Center, Tottori University 鳥取大
学乾燥地研究センター
Raindrop (雨滴について)
Mohamed Abd Elbasit MOHAMED AHMED
Arid Land Research Center, Tottori University 鳥取大
学乾燥地研究センター

2.5 受賞

賞の名称：特別功労賞

受賞者：恒川篤史

受賞月日：2013年3月21日

授与団体：乾燥地開発国際委員会

研究タイトル：乾燥地開発に対する顕著な研究貢献

賞の名称：染色体学会論文賞

受賞者：趙晟佑・森玉陽介・石井孝佳・岸井正浩・田中

裕之・アミンエリタエブ・辻本壽

受賞月日：2012年10月6日

授与団体：(財)染色体学会

研究タイトル：Homology of two alien chromosomes during meiosis in wheat

2.5 Honors and Awards

Name of Prize: Life-time Achievement Award

Name of Recipient: Atsushi Tsunekawa

Date: Mar. 21, 2013

Name of Offering Organization: The International Dryland Development Commission (IDDC)

Research Title: For his outstanding research contributions for the development of drylands

Name of Prize: Society of Chromosome Research, Best paper prize

Name of Recipient: Cho, S.-W., Moritama, Y., Ishii, T., Kishii, M., Tanaka, H., Eltayeb, A.E. and Tsujimoto, H.

Date: Oct. 6, 2012

Name of Offering Organization: Society of Chromosome Research

Research Title: Homology of two alien chromosomes during meiosis in wheat